

ABSTRACT

The invention provides rubber composition usable for the manufacture of tires, comprising at least (i) one diene elastomer, (ii) one white filler as reinforcing filler and (iii) one coupling agent (white filler/elastomer), the white filler comprising a titanium

5 oxide having the following characteristics:

- (a) it comprises more than 0.5% by mass of a metallic element, other than titanium, selected from the group consisting of Al, Fe, Si, Zr and mixtures thereof;
- (b) its specific BET surface area is between 20 and 200 m²/g;
- (c) its average particle size (by mass), d_w, is between 20 and 400 nm; and
- 10 (d) its disagglomeration rate, α , measured by the ultrasound disagglomeration test, at 100% power of a 600-watt ultrasonic probe, is greater than $2 \times 10^{-2} \mu\text{m}^{-1}/\text{s}$.

The invention also provides for the use of a rubber composition according to the invention for the manufacture of rubber articles, in particular tires or semi-finished rubber products intended for these tires. The composition of the invention is particularly useful for the 15 manufacture of colored tires or colored semi-finished articles such as tire treads or sidewalls.